

620001

To

20040

ALBATROSS

1919

Albatross

Albathross

1919

Doomed with snapper had bent on
to heavy line

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Bottom net, (cable out 100 m)	near bottom	P/M 3:25	P/M 4:00	40-45 Rev.
meter net	5-6	3:25	3:55	
1/2 meter net	0	3:27	3:32	
#20 net		3:30	3:50	
30' otter (flounder) trawl cable out about 170 fms.		4:35	4:58	

11-5314

NOTES

Bottom & meter nets towed 30 min,
surface nets towed 20 min.

Otter trawl towed 15 min, did not
reach bottom.

Station No. *C 20002*Date: *Oct 30*191*9*Hour: *8:00 P.M.* to *9:20 P.M.*Position: Lat. *36°47' 00" N* Long. *75°06' 00" W*Locality: *Cape Henry*Depth: *31 m*Bottom: *S, sh*Sample: *none*

Wind: Direction,

Force,

*Air 67*Sea: *smooth*Sky: *clear*

TEMPERATURES

Depth meters	Thermometer— Make and No. B.S. #	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0		<i>20.80°C</i> <i>69.5 F</i>				✓	
15	<i>SW 9383</i>					✓	
	<i>R 11499</i>	<i>17.25</i>	<i>19.0</i>	<i>-.04</i>	<i>17.21</i>		
30	<i>R 11500</i>	<i>16.30</i>	<i>19.0</i>	<i>-.07</i>	<i>16.23</i>	✓	
	<i>NZ 20872</i>						

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Sounded with snapper lead*
bent on to heaving line.

11-5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Vertical 1/2 meter net	30-0	P.M.	P.M.	
Bottom net	30-0	8:50	9:20	
1/2 meter net	0	} towed 25 min.		
#20 net	0			

11-5314

NOTES

Very rich vertical haul
 Rich meio. haul
 Surface net (1/2m) scanty
 Rich haul young fishes in bottom net

Station No. C20003

Date: Oct 30 ~~Nov 1~~

1919

Hour: 12:00 ~~midnight~~ M. to 1:30 A. . M.

Position: Lat. 36° 44' 40" N Long. 74° 41' 30" W

Locality:

Depth: 93 m

Bottom: S, sh.

Sample: n

Wind: Direction,

Force, Light

Air 67

Sea: smooth

Sky: clear

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0		17.80 64.0 F				✓	
10	R11499 SV 9383	17.85	19.0	-.03	17.82	✓	
30	NZ 20872					✓	
60	R11500 SV 9388	16.60	19.0	-.07	16.53	✓	
90	R11497 R11498 NZ 20876	10.18 11.10	19.0 19.0	-.22 -.17	9.96 10.93	✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Electric sdy mchm, snapper lead 11-5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Vertical 1/2 meter net	90-0	AM	AM	
Bottom net	75-0	1:00	1:30	
1/2 meter net #20 net	} 0	towed 20 min		

11-5314

NOTES

Vertical haul abundant

Bottom net - rich haul, salpae & young fishes

1/2 meter net, surface, mostly salpae
#20. surface, scanty micro.

1919

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Vertical 1/2 meter net	200-0	AM		
Bottom net and mud bag	200-0 bottom	5:15	5:45	
#20 net 1/2 meter net	0	Towed 25 min.		

11-511

NOTES

Sulf mud
 Vertical haul abundant
 Plankton scanty
 some merluccius & 1 chione.

Station No. C 20005

Date: Oct 31

1919

Hour: 8:00 A.M. to 5:30 P.M.

Position: Lat ^{7:30 AM From} $36^{\circ}35'30''N$ [✓] Long. $74^{\circ}23'30''W$ [✓]
 Lat ^{12:55 PM From} $36^{\circ}31'30''N$ [✓] Long. $74^{\circ}28'00''W$ [✓]
 Lat ^{5:30 PM To} $36^{\circ}35'30''N$ [✓] Long. $74^{\circ}23'30''W$ [✓]

Locality:

Depth: 2029 m Bottom: gn. S. M.

Sample: ^{T.T.} 11252

Wind: Direction, E

Force, 1

Air 71-76-71

Sea: smooth

Sky: partly cloudy

TEMPERATURES

Depth	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
metes	B.S. #	119.40					
0		16.7 F					
50	SV 9388						
	R 11497	14.92	21.0	-.17	14.75		
100	R 11499	14.1	21.0	-.14	13.96		
	SV 9383	14.1	21.0				
200	R 11500	13.4	21.0	-.21	13.19		
	NZ 20872	Temp. too high for therm.					
400	R 11498	6.00	21.0	-.30	5.70		
	NZ 20876	6.10	21.0	-.35	5.75		
600	R 11497	4.90	21.0	-.35	4.55		
	S.V. 9388						
1000	R 11499	4.20	18.5	-.26	3.94		
	S.V. 9383	4.30	19.0				
1400	NZ 20876	3.81	19.0	-.34	3.47		
	R 11498	3.70	17.0	-.26	3.44		
1800	R 11500	3.65	16.0	-.24	3.41		
	NZ 20872	3.72	19.0	-.37	3.35		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Lucas say net, replace net, 60 lb shot.
 At noon ran back to position at beginning
 of station; from noon to 5:30 pm. drifted NE,
 at rate 7.9 K. per hour.

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical 1/2 mile net	400	4:05	4:17	40 Rev
Bottom net (cable out 500 m)	600-0	4:37	5:01	
Water net (cable out 300 m)	200-0			
1/2 mile #20	0	4:40	5:05	

11-5411
 Drifted from betw 7:30 AM. to and 12:00 noon.
 NOTES
 Lat $36^{\circ} 34' 30''$ Long $74^{\circ} 21' 00''$
 $36^{\circ} 30' 00'' N - 74^{\circ} 28' 30''$

All hauls scanty except bottom net, which had fair haul copepods & few mysidopods.

1 6" eel fish (dennelia sp, taken

Bottles down, lowest 1800 m, messenger traveled 9 min, or 200 m per min.

1919

REMARKS: Elect. edg. mch. Snapper lead 11-5914

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Bottom net (cable out 40 m)	25 0	10:40	11:10	30-35 Rev
1/2 meter # 20	} 0	10:40	11:10	

11-5314

NOTES

A hammer head shark was noted
alongside, and a hook and line put
over, but failed to capture him.

Station No. C20007

Date: Nov. 1

1917

Hour: 1:00 P.M. to 3:00 P.M.

Position: Lat. 35° 01' 00" N Long. 75° 14' 00"

Locality: Cape Hatteras, SE from the cape

Depth: 223 m Bottom: S, sh, pebbles Sample: 76

Wind: Direction, WSW Force, 2

Air 81-80

Sea: choppy

Sky: partly cloudy

TEMPERATURES							
Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
meter	B.S. #	27.80					
0		82.0 F				✓	
50	R11500 NZ20872	27.55	27.5	-.04	27.51	✓	
100	R11499 S.V. 7383	26.90	28.0	-.05	26.85	✓	
150	R11498 NZ20876	24.92	27.0	-.07	24.85	✓	
200	R11500 NZ20872	16.34	26.0	-.23	16.11	✓	

CURRENTS						
Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: 1st temp. may have been 27.55 or 27.60; 2d temp. was almost too high for therm. glass.

11-5314

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical 1/2 meter*	200	1:43	2:15?	none to
Bottom net (about 200m)		2:35	3:00	24 Rev.
1/2 meter at 20	0	2:35	3:00	do

11-5314

NOTES

* On first trial with water bottles they failed to trip, so were put over at same time as vertical net, to same depths as first time; as they had to be removed before the net was hauled in, the time up of net is not accurate.

Vertical net fairly abundant
Bottom net copepods, sagittae
Surface nets scanty.

Station No. C 20008

Date: Nov. 1

1919

Hour: 7:35 P.M. to 10:50 P.M.

Position: Lat. From $34^{\circ} 54' 30''$ N Long. $75^{\circ} 07' 5''$ W
To $34^{\circ} 58' 50''$ N $75^{\circ} 02' 00''$ W

Locality: 15 mi. S.E. from Diamond Shoal, Cape Hatteras

Depth: *1050 ? Bottom: Sample:

Wind: Direction, SW Force, fresh (3)

Air 79

Sea: choppy Sky: cloudy

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B.S.	26.7 80.0				✓	
50	S.V. 9383					✓	
	R11499	26.44	25.0	+0.01	26.45		
100	R11500	25.62	25.5	-0.04	25.58	✓	
	NZ 20872						
150	R11498	26.39	25.0	±0.00	26.39	✓	
	NZ 20876						
200	R11500	18.20	25.0	-0.17	18.03	✓	
	NZ 20872						
400	R11497	16.67	25.0	-0.23	16.44	✓	
	SV 9388						
600	R11499	13.14	25.0	-0.24	12.90	✓	
	SV 9383						
800	R11498	12.05	26.0	-0.29	11.76	✓	
	NZ 20876						
1000	R11500	9.18	25.0	-0.32	8.86	✓	
	NZ 20872	9.05	26.0	-0.44	8.61		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
200	R11499	23.90	25.0	-0.04	23.86	
	SV 9383					
200	R11498	23.10	25.0	-0.06	23.04	
	NZ 20876					

Color of water:

Transparency:

REMARKS: acc. to spec. instr. temp. and 60 b. shot 11-5114

* Could not be determined whether temp. and time
fell in; on rising in to see whether shot dropped off
wire; at 10:50 from wire and temp. and
wind away.

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
No net used				

11-5314

NOTES

B.
 Messenger (doubled) traveled 400 m.
 in 2 min., 15 sec.
 Wire, with water bottle, at angle of 40° (about),

(Faint handwritten notes, possibly a signature or date, at the bottom right of the page.)

✓

Station No. 20009 Date: Nov. 9 1919

Hour: 5:25 P. M. to 5:40 P. M.

Position: Lat. 29° 55' 30" N Long. 81° 15' W

Locality: Off St. Augustine, Fla.

Depth: 9 1/2 fms Bottom: S, sh. Sample: no
17 meters

Wind: Direction, NE Force, stiff breeze
Air 72

Sea: choppy Sky: partly cloudy

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>metes</i>	<u>B. S. 22</u>	<u>(25.78 C</u>					
<u>0</u>		<u>77.50 F</u>				✓	
<u>14</u>	<u>SV 9383</u>	<u>24.57</u>	<u>23.0</u>	<u>1.02</u>	<u>24.59</u>	✓	<u>W. 14</u>
	<u>R11499</u>						

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: Heaving line, snapper lead.

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
<i>No nets</i>				

11-5314

NOTES

191 ↗

Hour: 1:38 P . M. to 1:55 P . M.

Position: Lat. $27^{\circ} 34' 00''$ N Long. $80^{\circ} 10' 00''$ W

Locality: Off Indian R. Inlet buoy

Depth: 10 fms
18 meters Bottom: S, sh. Sample: 120

Wind: Direction, *ESE*

Force, *stiff breeze*
Air 78

Sea: *Choppy*

Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer— Make and No. B.S.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	{ 25.3 } { 77.5 }	→				✓	
16	SV 9388 0					✓	46
	R 11497	x 24.85	23.5	-0.4	24.81		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: *Green*

Transparency:

REMARKS: Hearing line, snuffa line

11—5314

Station No. 20011

Date: Nov. 10

1919

Hour: 3:30 P.M. to 4:20 P.M.

Position: Lat. From $27^{\circ} 31' 00'' N$ Long. $77^{\circ} 55' 30'' W$
To $27^{\circ} 37' 00'' N$ $77^{\circ} 56' 3''$

Locality: 11 mi E from Indian River Inlet buoy.

Depth: 85 m

Bottom: S, sh

Sample: no

Wind: Direction, ESE

Force, stiff breeze
Air 79

Sea: choppy

Sky: cloudy (showers)

TEMPERATURES

Depth meters	Thermometer - Make and No. B.S.#	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0		26.90 80.5					
14	SV 9388	0				✓	#6
	R 11497	x 26.20	24.0	-03	26.17		
34	SV 9383	0				✓	#3
	R 11499	x 26.15	24.0	+02	26.17		
54	NZ 20872	0				✓	#4
	R 11500	x 25.90	24.0	+01	25.91		
74	NZ 20876	0				✓	#5
	R 11498	x 25.65	24.0	+01	25.66		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Blue

Transparency:

REMARKS: Collected. sdr. snapper lead

11-5314

Wire (with bottles) $< 15^{\circ}$

NETS, ETC., USED

Description	Depth <i>meters</i>	TIME		Speed
		Down	Up	
Vertical (1/2 m)	45			
Mudbag	6			

11-5314

NOTES

Vertical haul scanty micro.

Mudbag few shells

Station No. 10012

Date: Nov. 10

1919

Hour: 7:00 P.M. to 9:00 P.M.

Position: Lat. *From* $27^{\circ} 34' 05'' N$ Long. $79^{\circ} 36' 00'' W$
To $27^{\circ} 41' 30'' N$ $79^{\circ} 36' 00'' W$ Locality: 1 mi. ^E from Indian R. Inlet BayDepth: ^{240 fms} 432 meters Bottom: gy. M. S.T.T.
Sample: 11254Wind: Direction, ESE Force, stiff breeze
Air 79.

Sea: choppy Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer Make and No. B.S. #	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0		$\begin{cases} 27.75 \\ 82.0 \end{cases}$				✓	
50	NZ 20876	0				✓	#1
	R 11498	x 27.19	23.5	+06	27.25		
100	NZ 20872	0				✓	#4
	R 11500	x 24.33	23.5	-01	24.32		
150	SV 9383	0				✓	#3
	R 11499	x 20.64	23.5	-07	20.62		
200	SV 9383	0				✓	#6
	R 11497	x 17.89	23.0	-16	17.73		
250	SV 9388	0				✓	#6
	R 11497	x 16.42	24.5	-22	16.20		
300	SV 9383	0 15.44	26.0	-22		✓	#5
	R 11499	x 15.40	26.0	-22	15.18		
350	NZ 20872	0				✓	#4
	R 11500	x 12.04	26.0	-30	11.74		
400	NZ 20876	0 8.94	26.0	-36	8.58	✓	#5
	R 11498	x 8.95	26.0	-34	8.61		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Lucas, dr, Dupree wd, cold since

11-5314

Wind (with force) angle 25°

NETS, ETC., USED

Description	Depth <i>meters</i>	TIME		Speed
		Down	Up	
Vertical (1/2 m)	250			

11-5314

NOTES

On heaving in vertical net, a sudden roll, the ship listed to starboard, bridle parted above ring, & ring, net & 85 lb. sinker carried away.

Station No. 20013

Date: Nov. 11

191 ↗

Hour: 12:23 A.M. to 1:55 A.M.

Position: Lat. $27^{\circ} 34' 00''$ N Long. $79^{\circ} 11' 00''$ W
 T₆ $27^{\circ} 37' 30''$ N $79^{\circ} 11' 00''$ W

Locality: 51-53(a) mi. E from Doherty R. Inlet buoy,
north of Little Bohemia Bank (western edge)
Depth: *418 fms? Bottom: S. sh Sample: no

Wind: Direction, E

Force, stiff brace

Air 77-76

Sea: Choppies

Sky: cloudy, (showers)

TEMPERATURES

Depth meters	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B. S. #	27.75 82.0				✓	#
20	NZ 20876	0				✓	5
	R 11498	x 27.30	23.5	+06	27.36		
60	NZ 20872	0				✓	4
	R 11500	x 27.04	24.0	+04	27.38		
100	SV 9383	0				✓	3
	R 11499	x 26.40	23.5	+04	26.44		
150	SV 9388	0				✓	6
	R 11497	x 22.04	24.0	-10	22.24		
200	SV 9388	0				✓	6
	R 11497	x 19.96	25.0	-17	19.79		
250	SV 9383	0				✓	3
	R 11497	x 17.94	26.0	-17	17.77		
300	NZ 20872	0				✓	4
	R 11500	x 17.32	26.0	-21	17.11		
350	NZ 20876	0				✓	5
	R 11498	x 16.40	26.0	-22	16.18		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Lucas rd, near rd, 60 ft. wide. 11-5314

11-5314

This depth is seriously questioned; otherwise
tended at a very wide interval; depths
on chart shown to be 100-500 fms.

Station No. 20014

Date: Nov. 11

1919

Hour: 7:18 P. M. to 7:40 P. M.

Position: Lat. $25^{\circ} 34' 30''$ N Long. $80^{\circ} 04' 00''$ W

Locality: Foreway Rock

Depth: 55 fms
100 m. Bottom: S, sh Sample: no

Wind: Direction, E Force, 1

Air 76

Sea: smooth Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B.S.#	$\left\{ \begin{array}{l} 26.9 \\ 80.5 \end{array} \right.$				✓	
30	SV 9388	0				✓	6
	R 11497	x 26.38	24.0	-02	26.36		
60	NZ 20872	0				✓	4
	R 11500	x 26.44	25.0	-01	26.43		
90	NZ 20876	0				✓	5
	R 11498	x 24.60	24.0	+03	24.63		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: E. cent. sdr, deeper red

11-5314

Station No. *C 20015*Date: *Nov. 11*

1919

Hour: *8:05 P.M.* to *9:55 P.M.*Position: Lat. *From 25° 34' 00" N* Long. *79° 57' 30" W*
To 25° 36' 00" N 79° 57' 30" W

Locality:

Depth: *177 fms* Bottom: *S, gy M*Tintag
Sample: *11255*Wind: Direction, *E* Force, *1**Air 76-75*Sea: *smooth*Sky: *partly cloudy*

TEMPERATURES

Depth	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
meters	<i>B.S. #</i>	<i>26.7</i>					<i>#</i>
<i>0</i>		<i>80.0</i>				<i>✓</i>	
<i>50</i>	<i>SV 9383</i>	<i>0</i>				<i>✓</i>	<i>3</i>
	<i>R 11499</i>	<i>x 26.34</i>	<i>26.0</i>	<i>-02</i>	<i>26.32</i>		
<i>100</i>	<i>SV 9388</i>	<i>0</i>				<i>✓</i>	<i>6</i>
	<i>R 11497</i>	<i>x 22.63</i>	<i>25.0</i>	<i>-12</i>	<i>22.51</i>		
<i>150</i>	<i>SV 9388</i>	<i>0</i>				<i>✓</i>	<i>6</i>
	<i>R 11497</i>	<i>x 16.54</i>	<i>24.0</i>	<i>-21</i>	<i>16.33</i>		
<i>200</i>	<i>SV 9383</i>	<i>0</i>	<i>24.5</i>			<i>✓</i>	<i>3</i>
	<i>R 11499</i>	<i>x 10.45</i>	<i>25.0</i>	<i>-28</i>	<i>10.17</i>		
<i>250</i>	<i>NZ 20872</i>	<i>0</i>	<i>25.0</i>	<i>-42</i>	<i>9.12</i>	<i>✓</i>	<i>4</i>
	<i>R 11500</i>	<i>x 4.29</i>	<i>25.0</i>	<i>-32</i>	<i>8.97</i>		
<i>300</i>	<i>NZ 20876</i>	<i>0</i>	<i>25.0</i>	<i>-36</i>	<i>8.08</i>	<i>✓</i>	<i>5</i>
	<i>R 11498</i>	<i>x 8.41</i>	<i>25.0</i>	<i>-33</i>	<i>8.08</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Lucas sdr, sigs rod*

11-5314

Messenger bottles down 50 meters in 10 secs.

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 m)	240-0	P.M.		
Bottom net (out 400 m)	bottom-0	9:10	9:55	
1/2 meter * 20	0	9:15	9:40	

11-5314

NOTES

Bottom net towed 30 min

Surface net towed 25 min.

Vertical haul rich - copepods, sagittae, young fish
 Bottom haul fair - copepods, young fish
 Surface hauls fair, young fish (including dolphin)

Station No. *C 20016*Date: *Nov. 12*191*9*Hour: *12:12 A.M. to 2:51 A.M.*Position: Lat. From *25° 31' 00" N* Long. *79° 45' 30" W*
To *25° 40' 30" N* *79° 45' 30" W*

Locality:

Depth: *450 fms*
*822 m*Bottom: *gy M*Tide Tag
Sample: *#11256*

Wind: Direction,

Force, *2**Air 74-78*Sea: *smooth*Sky: *cloudy*

TEMPERATURES

Depth	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
meters	B.S. #						#
0		<i>(27.75</i> <i>82.0</i>				✓	
50	<i>NZ 20876</i>	<i>o</i>				✓	<i>5</i>
	<i>R 11498</i>	<i>x 27.26</i>	<i>26.5</i>	<i>-02</i>	<i>27.24</i>		
100	<i>NZ 20872</i>	<i>o</i>				✓	<i>4</i>
	<i>R 11500</i>	<i>x 25.92</i>	<i>26.5</i>	<i>-05</i>	<i>25.87</i>		
150	<i>SV 9383</i>	<i>o</i>				✓	<i>3</i>
	<i>R 11499</i>	<i>x 21.18</i>	<i>26.0</i>	<i>-12</i>	<i>21.06</i>		
200	<i>SV 9388</i>	<i>o</i>				✓	<i>6</i>
	<i>R 11497</i>	<i>x 18.10</i>	<i>25.5</i>	<i>-22</i>	<i>17.88</i>		
300	<i>SV 9388</i>	<i>o</i>				✓	<i>6</i>
	<i>R 11497</i>	<i>x 14.91</i>	<i>25.0</i>	<i>-26</i>	<i>14.65</i>		
400	<i>SV 9383</i>	<i>o</i>	<i>26.0</i>	<i>-</i>		✓	<i>3</i>
	<i>R 11499</i>	<i>x 11.87</i>	<i>26.0</i>	<i>-28</i>	<i>11.59</i>		
600	<i>NZ 20872</i>	<i>o</i>	<i>25.0</i>	<i>-45</i>	<i>6.97</i>	✓	<i>4</i>
	<i>R 11500</i>	<i>x 7.33</i>	<i>25.0</i>	<i>-36</i>	<i>6.97</i>		
800	<i>NZ 20876</i>	<i>o</i>	<i>24.5</i>	<i>-40</i>	<i>5.90</i>	✓	<i>5</i>
	<i>R 11498</i>	<i>x 6.22</i>	<i>24.0</i>	<i>-35</i>	<i>5.87</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Lucas m, 1/2 m, 1000.*

11-5314

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 m)	800 - 0	AM		
Bottom net, cable out 100 m)	350 - 0	2:05	2:30	
Meter net (" " 200 m)	175 - 0	2:05	2:40	
1/2 meter #20	}	2:02	2:27	

11-5314

NOTES

Bottom & meter nets towed 30 min.
Surface nets towed 15 min.

Vertical haul, scanty - net fouled in bridle

Bottom & meter hauls fair

Surface hauls scanty

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 m)	800-0	A.M.		
Bottom net (cable out 800 m)	700-0	7:04	7:46	
Water net " " 300 m)	200-0	7:04	7:38	
1/2 meter to 20	0	6:55	7:20	

11-5314

NOTES

Bottom + water nets towed 30 min.
surface nets towed 2 min.

Vertical haul scanty
Bottom + water hauls
surface nets scanty micro.

A shark (*Thalassorhynchus randoletii* ?)
was taken at this station.

Total length 150 cm. ♂ juv.

Stomach contents:

Cuttlefish beak

Crustacean shell (portion).

The jaws, anal, pectoral and a section
of skin 10 cm square, were preserved in
alcohol. Tin Tag # 11258

Notes below not to be entered in dredge-
table or on station-record sheets.

Measurements of the shark mentioned above:

Length 150 cm. (Measurements in
centimeters)

Snout - 1st dor. 48

Front 1st dor - Fr. 2nd dor. 48

2nd dor - caud. tip 13

Height 1st dor. 15

" 2nd dor. 4

Pectoral length 23.5

Front pect. - Fr. ventral 42

" ventral - Fr. anal 23.5

" anal - caud. pit 13.5

Ventral (length) 6

Anal " 7

Upper lobe caud. (length) 40.5

Lower " " " 18.5

Caud. notch - caud. tip 8.5

Orange
checked
H. S. G. W.

Station No. *C 20018* Date: *Nov. 15* 191*9*

Hour: *6:18 P.M.* to *7:52 P.M.*

Position: Lat. *24° 25' 00" N* Long. *81° 00'*

Locality: *Off Sand Key, Fla.*

Depth: *59 fms* Bottom: *S, sh* Sample: *Tin Tag * 11259*

Wind: Direction, *NE* Force, *1*
Air 84-78
Sea: *smooth* Sky: *partly cloudy*

TEMPERATURES

Depth	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>meters</i>	<i>B. S. #</i>	<i>26.9</i>					<i>2</i>
<i>0</i>		<i>80.5</i>				<i>✓</i>	
<i>30</i>	<i>NZ 165868</i>					<i>✓</i>	<i>6</i>
	<i>R 11497</i>	<i>26.34</i>	<i>26.0</i>	<i>-07</i>	<i>26.27</i>		
<i>60</i>	<i>SV 9383</i>					<i>✓</i>	<i>3</i>
	<i>R 11499</i>	<i>25.97</i>	<i>26.0</i>	<i>-03</i>	<i>25.94</i>		
<i>90</i>	<i>NZ 20872</i>					<i>✓</i>	<i>4</i>
	<i>R 11500</i>	<i>21.07</i>	<i>25.5</i>	<i>-13</i>	<i>20.94</i>		
<i>100</i>	<i>NZ 20872</i>					<i>✓</i>	<i>4</i>
	<i>R 11500</i>	<i>19.39</i>	<i>24.5</i>	<i>-13</i>	<i>19.26</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS: *Elect. pdr, snapper, lead*

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	100 - 0	PM		
Bottom net, cable out 140 m.	100 - 0	7:18	7:52	
1/2 meter # 20	0	7:15	7:40	

11-5314

NOTES

Bottom net towed 30 min.

Duffau nets towed 25 min.

Bottom haul rich for this region

Vertical haul rich " " (young fishes, crabs)

20 haul

1/2 meter rich

Station No. C 20019

Date: Nov. 15-16

1917

Hour: 9:42 PM Nov 15 M. to 12:53 AM Nov 16 M.

Position: Lat. From 24° 10' 30" N Long. 82° 00' 00" W
To 24° 07' 30" N 81° 58'

Locality:

Depth: 359 fms Bottom: gy M Sample: Tin Tag # 11260
656 metersWind: Direction, NE Force, 1-2
Air 76-73-77

Sea: smooth Sky: clear

TEMPERATURES

Depth meters	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B. S. #	26.7 80.0				✓	
50	NZ 20876	25.90	25.5	-01	25.89	✓	5
	R 11498						
100	NZ 20872	20.56	24.5	-11	20.45	✓	4
	R 11500						
150	SV 9383	16.78	24.0	-14	16.64	✓	3
	R 11499						
200	NZ 165868	13.64	24.0	-29	13.35	✓	6
	R 11497	13.61	23.0	-24	13.37		
300	NZ 165868	11.52	23.0	-29	11.03	✓	6
	R 11497	11.30	22.0	-26	11.04		
400	SV 9383	10.61	23.0	-24	10.37	✓	3
	R 11499	10.54	23.0	-24	10.37		
500	NZ 20872	9.21	24.0	-40	8.81	✓	4
	R 11500	9.12	23.0	-28	8.84		
600	NZ 20876	7.92	23.5	-34	7.58	✓	3
	R 11498	7.89	25	-34	7.55		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Under way, 1000 yds

11-5314

NETS, ETC., USED

Description	Depth <i>meters</i>	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	600-0	P.M.	A.M.	
Bottom net (cast net 600 m)	600-0	11:50	12:52	
Meter net (" " 200 m)	200-0	11:50	12:40	
1/2 meter # 20	0	11:35	12: midt	

11-5314

NOTES

Bottom net towed 1 hour
 Meter net towed 45 min.
 Surface nets towed 25 min.

1 vertical haul with
 Bottom haul fair - euphausiids, young fish, copepods, shrimp
 Meter haul rich, mostly from 100-0 meters,
 Surface hauls scanty
 1 Portuguese man-of-war taken

Station No. C 20020

Date: Nov. 66

1917

Hour: 2:00 A . M. to 5:08 A . M.

Position: Lat. From $23^{\circ} 58' 30'' N$ Long. $81^{\circ} 57'$
To $23^{\circ} 56' 30'' N$ $81^{\circ} 57'$

Locality:

Depth: 545 fms Bottom: gy M Sample: # 11261 ^{Tin Tin}

Wind: Direction, *NE* Force, *1 1/2*

Force, $1\frac{1}{2}$

Sea: smooth

Sky: ~~clear~~ to partly cloudy

TEMPERATURES

Depth meters	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
	B.S. #						
0		27.5 81.5				✓	
50	NZ 20876	o				✓	5
	R 11498	x 27.32	27.0	-02	27.30		
100	NZ 2087	o				✓	4
	R 11500	x 23.05	26.0	-10	22.95		
200	SV 9383	o 15.22	25.0	—	—	✓	3
	R 11499	x 15.16	25.0	-20	14.96		
300	NZ 165868	o 11.48	24.5	-31	11.17	✓	6
	R 11497	x 11.46	24.0	-30	11.16		
400	NZ 165868	o 10.09	25.0	-32	9.77	✓	6
	R 11497	x 10.08	24.5	-33	9.75		
500	SV 9383	o 9.46	25.0	—	—	✓	3
	R 11499	x 9.35	25.0	-29	9.06		
700	NZ 20872	o 7.38	26.0	-47	6.91	✓	4
	R 11500	x 7.31	25.0	-36	6.95		
950	NZ 20876	o 6.10	24.0	-40	5.70	✓	5
	R 11498	x 6.02	23.0	-33	5.69		

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Secs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839,

11-111-4

NETS, ETC., USED

Description	Depth <i>meters</i>	TIME		Speed
		Down	Up	
		AM		
Bottom net (6 out 1000 m)	900-0	3:52	5:08	
Water net (6 out 100 m)	200-0	3:52	4:50	
1/2 meter #20	}	0	3:40	4:40

11-5314

NOTES

Bottom & water nets towed 1 hr
Surface nets towed 1 hr.

Bottom hard sandy
Water hard very rich
Surface nets
1/2 meter rich
#20 sandy.

Station No. C 20021

Date: Nov. 16

1919

Hour: 7:08 A.M. to 10:27 A.M.

Position: Lat. From 23° 42' 30" N Long. 82° 08' 30" W
To 23° 38' 00" N 82° 08' 30" W

Locality:

Depth: 900 fms
1645 miles Bottom: gy M, Pter Oz Sample: #11202 Tin TagWind: Direction, NE Force, 2
Air 77-80

Sea: choppy Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer— Make and No. B.S. #	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used *
0		28.1 82.5				✓	
50	NZ 20872 R 11500	27.5	25.0	+02	27.72?	✓	11
100	NZ 20876 R 11498	26.53	25.0	+01	26.54	✓	5
200	NZ 20876 R 11498	18.97	25.0	-14	18.83	✓	5
300	NI 20812 R 11500	15.34	25.5	-23	15.11	✓	4
400	SV 9383 R 11499	11.43 11.35	26.0	-28	11.07	✓	3
600	NZ 165868 R 11497	8.51 8.56	25.0	-31	8.23	✓	
800	NZ 165868 R 11497	6.75 6.72	25.0	-30	6.45	✓	
1000	SV 9383 R 11499	6.21 6.10	25.5	-36	5.74	✓	

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
1300	NZ 20872	5.73	26.5	-51	5.22	✓
	R 11500	5.73	26.0	-41	5.32	
1600	NZ 20876	4.71	25.5	-45	4.26	✓
	R 11498	4.68	24.5	-39	4.29	

Color of water: Blue

Transparency:

REMARKS: Surveys, etc., (p. 10)

11-5314

* Reading probably not more than .2 higher,
but top of mercury column could not be seen

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	500-0	A/K		
Bottom net (400-0 to 600 m)	400-0	9:45	10:21	
Net (" " 300 m)	200-0	9:45	10:20	
1/2 meter	0	9:55	10:15	
#20	0	9:45	10:15	

11-5314

NOTES

Bottom net towed 30 min.
 1/2 meter net towed 20 min.
 #20 net towed 25 min.

Vertical haul rich
 Bottom haul scanty
 Net haul very rich
 Surface hauls scanty

In comparison with hauls of last station, these hauls well illustrate the descent of organisms with the approach of light.

Station No. 20022

Date: Nov. 16

1919

Hour: 11:45 A. M. to 1:49 P. M.

Position: Lat. From $23^{\circ}29'45''N$ Long. $82^{\circ}14'$
To $23^{\circ}28'00''N$ $82^{\circ}12'30''W$

Locality:

Depth: 920 fms
1681 meter Bottom: gy M, Pter Oz Sample: ^{Tin Tag} # 11263

Wind: Direction, NE Force, 2

Air 81-80

Sea: slightly choppy Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B. S. #	28.6 83.5				✓	
50	NZ 165868	21.57	21.5		27.50+	✓	6
100	NZ 20876	26.51	27.5	-0.5	26.46	✓	5
200	NZ 20876	20.46	26.0	-1.4	20.32	✓	5
300	NZ 20872	16.37	26.5	-2.4	16.13	✓	4
400	SV 9383	12.82	26.5			✓	3
	R 11499	12.13	26.0	-2.6	12.47		
600	NZ 165868	8.18	26.0	-3.3	8.45	✓	6
	R 11497	8.77	25.5	-3.8	8.39		
800	NZ 165868	6.15	26.5	-3.2	6.43	✓	6
	R 11497	6.70	26.0	-4.2	6.28		
1000	SV 9383	5.94	26.5			✓	3
	R 11499	5.81	26.5	-3.8	5.43		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
1300	NZ 20872	5.28	27.0	-53	4.75	✓ 4
	R 11500	5.25	26.0	-42	4.83	
1600	NZ 20876	4.69	26.0	-46	4.23	✓ 5
	R 11498	4.67	25.0	-40	4.27	

Color of water: Blue

Transparency:

REMARKS: Sun as pdr, sig and

11-5311

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	

11-5314

NOTES

Station No. C 20023

Date: Nov. 21

1919

Hour: 9:35 A.M. to 1:41 P.M.

Position: Lat. \checkmark From $21^{\circ}50'00''N$ \checkmark $85^{\circ}08'00''W$
To $21^{\circ}52'15''N$ Long. $85^{\circ}09'30''W$

Locality: Off Havana, Cuba

Depth: 645 fms Bottom: gy M Sample: Tin Tag 11260

Wind: Direction, NNE Force, 2 Air 80-82

Air 80.

Sea: Choppy Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B.S. *	{ 27.75 82.0					
50	112 1165868						6
100	R 11497	27.24	27.0		27.204		
200	NZ 20872						4
200	R 11500	26.75	27.0	-05	26.70		
300	SV 9383						3
300	R 11499	23.66	26.0	-07	23.59		
400	NZ 1165868	19.22	26.0	-27	18.95		6
400	R 11497	19.15	26.0	-21	18.94		
600	NZ 1165868	17.19	26.0	-29	16.90		6
600	R 11497	17.34	26.0	-24	17.10		
900	SV 9383	12.03	26.0				3
900	R 11499	11.94	26.0	-27	11.67		
1200	NZ 20872	7.20	27.0	-50	6.70		4
1200	R 11500	7.11	26.0	-38	6.73		
1200	NZ 20876	5.51	26.5	-46	5.05		5
	R 11498	5.49	26.0	-40	5.09		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Blue

Transparency:

REMARKS: Luca, sds, Sigs wcl

11-5314

Win (bottles) angle 40° (1st shot) - 45° (2nd shot)

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	600-0	PM		
Bottom net (cable out 1300 m)	1100-0	12:40	1:40	
Meter net (" " 1300 m)	1100-0	12:40	1:40	
1/2 meter # 20	} 0	12:30	1:00	

11-5014

NOTES

all nets towed 30 min.

The clamp, holding meter net, slid down the wire to the sinker, making the meter net haul at same depth as bottom net.

Vertical and surface hauls scanty.
Bottom + meter hauls (same depth) fair -
copepods, shrimp, lantern fishes.

Station No. C 200211

Date: Nov. 17

1919

Hour: 1:06 P. M. to 6:10 P. M.

Position: Lat. \checkmark From $21^{\circ}50'00''N$ \checkmark $85^{\circ}08'00''W$
 To $21^{\circ}52'15''N$ Long. $85^{\circ}04'30''W$

Locality: C. San Antonio, Cuba (Guantanamo Channel)

Depth: 910 fms Bottom: COS Sample: no
 1664 m

Wind: Direction, NNE Force, $1\frac{1}{2}$

Air 79-81

Sea: slightly choppy Sky: clear to cloudy

TEMPERATURES

Depth meter	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
	B. S.	27.5					#
0		81.5				<input checked="" type="checkbox"/>	
50	NZ 20872					<input checked="" type="checkbox"/>	4
	R 11500	27.32	27.0	-04	27.28		
100	NZ 20876					<input checked="" type="checkbox"/>	5
	R 11498	27.30	27.0	-02	27.28		
200	NZ 20876					<input checked="" type="checkbox"/>	5
	R 11498	21.19	26.0	-12	21.07		
300	NZ 20872					<input checked="" type="checkbox"/>	4
	R 11500	17.90	26.0	-20	17.70		
400	SV 9383	15.88	26.0			<input checked="" type="checkbox"/>	3
	R 11499	15.80	26.0	-21	15.59		
600	NZ 165868	11.25	26.0	-33	10.92	<input checked="" type="checkbox"/>	6
	R 11497	11.23	25.0	-32	10.91		
800	NZ 165868	7.13	26.5	-32	6.81	<input checked="" type="checkbox"/>	6
	R 11497	7.16	26.0	-42	6.74		
1000	SV 9383					<input checked="" type="checkbox"/>	3
	R 11499	5.20	26.0	-38	4.82		

CURRENTS

Depth	Hour	Tide	Time-down	Revolutions	Speed	Direction
1300	NZ 20872	4.70	26.0	-51	4.19	<input checked="" type="checkbox"/> 4
	R 11500	4.65	26.0	-43	4.22	
1600	NZ 20876	4.55	26.0	-46	4.09	<input checked="" type="checkbox"/> 5
	R 11498	4.52	25.0	-40	4.12	

Color of water: Blue

Transparency:

REMARKS: Lucas pdr, B. S. and
 200 (1000) fms

11-5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
9' Trawl (Ag frame) + mud bag (Cable out 2743 m. or 1500 fms.)	bottom	4:30	6:10	

11-5314

NOTES

Trawl towed 15 min

1 lantern fish 1 shrimp 1 piece crustacean shell.

On leaving in, at 10 fms. above the middle the wire looped and fouled, causing delay of 15 min.

When the net was brought in, it was found that the mud-bag had carried away and later had been picked up in the net.

Note below not the entire dredge table or in station sheet:*Carcharias? limbatus* ♀ (ship's side)

Length 141 cm

Head 27

Snout - 1st dor 48Base 1st dor 111st dor - 2nd dor 33½Base 2nd dor 32nd dor - caud notch 8

Upper lobe caud 38

Lower " caud 17

Pectoral 22½

Height 1st dor 142nd dor over analPectoral reaches under front of 1st dor

Anal strongly concave on outer margin

2nd dor and anal producedNo Spiracles

Reproductive organs inactive

Jaws and section of skin preserved
(in bag)

Station No. *C 200-5*Date: *Nov. 22-23 1919*Hour: *Nov 22*
9:45 P . M. to *11:55 A* . M. *Nov 23*Position: Lat. *From 21° 44' 30"*
To 21° 47' 30" N Long. *85° 39' 00"*
*85° 44' 15" W*Locality: *Yucatan channel*Depth: *—* Bottom: *—* Sample: *—*Wind: Direction, *E* Force, *2-3**Air 79-77*Sea: *heavy swell* Sky: *cloudy, light shower*

TEMPERATURES

Depth	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>meters</i>	<i>B.S. #</i>	<i>26.1</i>					<i>4</i>
<i>0</i>		<i>82.5</i>					
<i>50</i>	<i>NZ 20872</i>					<i>✓</i>	<i>11</i>
	<i>R 11500</i>	<i>x 27.45</i>	<i>27.0</i>	<i>-03</i>	<i>27.42</i>		
<i>100</i>	<i>NZ 20876</i>					<i>✓</i>	<i>5</i>
	<i>R 11498</i>	<i>x 27.41</i>	<i>27.0</i>	<i>-02</i>	<i>27.39</i>		
<i>200</i>	<i>HZ 20876</i>					<i>✓</i>	<i>5</i>
	<i>R 11498</i>	<i>x 20.71</i>	<i>26.0</i>	<i>-13</i>	<i>20.58</i>		
<i>300</i>	<i>NZ 20872</i>					<i>✓</i>	<i>11</i>
	<i>R 11500</i>	<i>x 18.19</i>	<i>26.0</i>	<i>-19</i>	<i>18.00</i>		
<i>400</i>	<i>SV 9383</i>					<i>✓</i>	<i>3</i>
	<i>R 11499</i>	<i>x 15.72</i>	<i>26.0</i>	<i>-21</i>	<i>15.51</i>		
<i>600</i>	<i>NZ 165868</i>	<i>10.57</i>	<i>25.0</i>	<i>-32</i>	<i>10.25</i>	<i>✓</i>	<i>6</i>
	<i>R 11497</i>	<i>x 10.52</i>	<i>25.0</i>	<i>-34</i>	<i>10.18</i>		
<i>800</i>	<i>NZ 165868</i>	<i>7.55</i>	<i>26.0</i>	<i>-32</i>	<i>7.23</i>	<i>✓</i>	<i>6</i>
	<i>R 11497</i>	<i>x 7.51</i>	<i>25.0</i>	<i>-39</i>	<i>7.12</i>		
<i>1000</i>	<i>SV 9383</i>					<i>✓</i>	<i>3</i>
	<i>R 11499</i>	<i>x 5.70</i>	<i>26.0</i>	<i>-37</i>	<i>5.33</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
<i>1300</i>	<i>NZ 20872</i>	<i>1.81</i>	<i>26.0</i>	<i>-53</i>	<i>4.28</i>	<i>✓ 11</i>
	<i>R 11500</i>	<i>x 4.76</i>	<i>26.0</i>	<i>-43</i>	<i>4.33</i>	
<i>1600</i>	<i>NZ 20876</i>	<i>1.59</i>	<i>25.5</i>	<i>-45</i>	<i>4.14</i>	<i>✓ 5</i>
	<i>R 11498</i>	<i>x 4.56</i>	<i>25.0</i>	<i>-40</i>	<i>4.16</i>	

Color of water:

Transparency:

REMARKS: *Lucas sdr, Sigs rod*

11-5714

*On beginning to sound, wire parted, reel
and pulley carried away.**Wire (bolter) angle 15°**(Messenger traveled 200 meters in 1 sec)*

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	500-0	AM		
Meter net (cable out 1600m)	1600-0	12:55	1:55	
1/2 meter # 20	0	12:50	1:20	

11-5314

NOTES

Meter + surface nets towed 30 min

Bu. dl. of #20 net parted, net carried away

Vertical haul scanty

Meter haul fair

1/2 meter haul (surface) scanty

copepods, shrimp, 1 lantern fish.

Several flying fishes flew aboard
during the night and were preserved,
(Tin tag #11266)

Station No. C 20026

Date: Nov. 23

1919

Hour: 5:32 A. M. to 10:20 A. M.

Position: Lat. $21^{\circ}31'00''$ N Long. $86^{\circ}08'30''$ W
To $21^{\circ}41'00''$ N Long. $86^{\circ}10'00''$ W

Locality: Yucatan Channel

Depth: 955 fms Bottom: 1745 meters Sample: —

Wind: Direction, N Force, 2

Air 76-78

Sea: heavy swell Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B.S. #	28.1 (82.5)				✓	4
50	N2 20876	27.35	26.0	-02	27.33	✓	5
100	SV 9383	25.23	26.5	-05	25.18	✓	3
200	N2 165868	19.05	25.0	-26	18.79	✓	6
300	N2 165868	17.39	25.0	-27	17.32	✓	6
400	SV 9383	15.29	26.0	-22	15.07	✓	5
600	N2 20876	11.81	25.0	-28	11.53	✓	6
800	N2 165868	7.40	26.0	-32	7.08	✓	6
1000	N2 20872	6.54	25.5	-48	6.06	✓	11
	R 11500	6.44	25.0	-37	6.07		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
1300	N2 20872	5.06	26.0	-52	4.54	✓ 11
1500	R 11500	4.92	26.0	-42	4.50	
1600	N2 20876	4.68	26.0	-46	4.22	✓ 5
	R 11498	4.63	25.0	-40	4.23	

Color of water: Blue

Transparency:

REMARKS: Lucas sdr pipe rod

11-5314

With 20 fms wire out, rod was carried
, heavy sea into propeller and lost

Wire (bottle, angle 20" 1" std, 25" 1" std)

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	500-0	A.M.		
Bottom net (cable out 1400 m)	bottom 0	9:15	10:20	
Meter net (cable out 400 m)	210 0	9:15	10:00	
1/2 meter # 20	}	9:00	9:45	

11-5314

NOTES

Bottom & meter nets towed 30 min.
Dredge nets towed 45 min.

Vertical haul scanty
Bottom haul rich - fishes, bottom-shrimp
Meter & surface hauls rich chiefly macro.

The current appeared to be between 300 and 400 meters down, as indicated by straining 7th cable.

Station No. C 20027

Date: Nov. 23

1919

Hour: 2:00 P. M. to 4:05 P. M.

Position: Lat. From 21°35'30" N To 21°42'30" N Long. 86°35'00" W 86°37'00" W

Locality: Cape Catoche, Mexico (Yucatan Channel)

Depth: 20 fms 36 meters Bottom: Co RK Sample:

Wind: Direction, NNE Force, 1

Air 84-86

Sea: smooth

Sky: partly cloudy

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
	B.S. #	(27.75)					*
0		(82.0)				✓	
9	NZ 20876					✓	-5
	R 11498	x 27.12	27.0	-03	27.09		
23	NZ 165868					✓	6
	R 11497	x 27.00	27.0	-08	26.92		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Blue

Transparency:

REMARKS: Eelish odor, orange line

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
Bottom net (cable out 10 m)	25.0	2:38	3:09	
1/2 meter #20	0	2:40	3:10	
9' Tur (Agassiz) cable net 200 fms bottom		3:42	4:05	

11-5314

NOTES

Bottom + surface nets towed 30 min
Beam trawl towed 18 min

Bottom + surface hauls rich
Beam trawl algae, hydroids,
mollusks, 3 species of fish (Mitsug 11267)

Station No. *C 20028*Date: *Nov. 24*191 *9*Hour: *3:27 P.M.* to *8:05 P.M.*Position: Lat. *From 23° 47' 30" N To 23° 43' 00" N* Long. *84° 23' 00" W 84° 16' 00"*Locality: *SE of Dry Tortugas*Depth: *1555 fms* Bottom: *rd cl* Sample: *Pin Tag #11271*
*2842 meters*Wind: Direction, *E* Force, *1**Air 81-77*Sea: *smooth* Sky: *partly cloudy*

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>meters</i>	<i>B.S. #</i>	<i>28.1</i>					<i>2</i>
<i>0</i>		<i>82.5</i>					
<i>50</i>	<i>NZ 20876</i>						<i>5</i>
	<i>R 11498</i>	<i>27.20</i>	<i>27.0</i>	<i>-02</i>	<i>27.18</i>		
<i>100</i>	<i>NZ 20872</i>						<i>4</i>
	<i>R 11500</i>	<i>27.22</i>	<i>27.0</i>	<i>-04</i>	<i>27.18</i>		
<i>200</i>	<i>NZ 20876</i>						<i>5</i>
	<i>R 11498</i>	<i>22.18</i>	<i>26.0</i>	<i>-10</i>	<i>22.08</i>		
<i>300</i>	<i>NZ 20872</i>						<i>4</i>
	<i>R 11500</i>	<i>17.81</i>	<i>26.0</i>	<i>-20</i>	<i>17.61</i>		
<i>400</i>	<i>SV 9383</i>						<i>3</i>
	<i>R 11499</i>	<i>14.98</i>	<i>26.0</i>	<i>-22</i>	<i>14.76</i>		
<i>600</i>	<i>NZ 165868</i>	<i>9.85</i>	<i>25.0</i>	<i>-33</i>	<i>9.52</i>		<i>6</i>
	<i>R 11497</i>	<i>9.86</i>	<i>25.0</i>	<i>-35</i>	<i>9.51</i>		
<i>900</i>	<i>NZ 165868</i>	<i>6.56</i>	<i>25.0</i>	<i>-30</i>	<i>6.26</i>		<i>6</i>
	<i>R 11497</i>	<i>6.57</i>	<i>25.0</i>	<i>-40</i>	<i>6.17</i>		
<i>1200</i>	<i>SV 9383</i>						<i>3</i>
	<i>R 11499</i>	<i>5.51</i>	<i>25.0</i>	<i>-36</i>	<i>5.15</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction
<i>1400</i>	<i>NZ 20872</i>	<i>4.84</i>	<i>26.0</i>	<i>-52</i>	<i>4.32</i>	<i>4</i>
	<i>R 11500</i>	<i>4.78</i>	<i>25.0</i>	<i>-40</i>	<i>4.38</i>	
<i>1800</i>	<i>NZ 20876</i>	<i>4.63</i>	<i>26.0</i>	<i>-46</i>	<i>4.17</i>	<i>5</i>
	<i>R 11498</i>	<i>4.61</i>	<i>25.0</i>	<i>-40</i>	<i>4.21</i>	

Color of water:

Transparency:

REMARKS: *Lucas sdr, 1615 rod*
Win (bottle) sample 20"

11-5314

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	500 0	PM		
Bottom net (cable out 1800 m)	1700-0	6:31	8:05	
Water net (cable out 300 m)	200-0	6:37	7:17	
1/2 meter # 20	0	6:35	7:10	

11-5314

NOTES

Bottom & water nets towed 30 min
Surface nets towed 35 min

Vertical haul scanty
Bottom, water and surface hauls rich

On hauling in bottom net, the last 30 fms were found hopelessly fouled; apparently the net struck a bank, allowing the wire to become slack, as 1500 fms. of water are indicated on all sides of this spot on chart.

Notes below not to be entered in dredge table or on station sheets:

Carcharias communis ♂ (ship's scale)

Length 180 cm

No Spiracles

Snout-1st dor 66

Upper caud. lobe 60

1st dor-2nd dor 48

Lower " lobe 30

2nd dor-card notch 15

Snout-mouth 13 1/2

Snout-Pectoral 52

Gape 21

Pect-Ventral 58

Snout-nostril 10

Vent'l-Anal 19

Nostril-pupil 9 Pupil vertical

Anal-card notch 11

Nostril=orbit

1st dor base 22

Last gill-split over pect.

" height 34

" width 30

Upper parts dk gy, lower whitish
tip 1st dor & caud mottled whitish

2nd dor base 7

" height 9

ventrals, anals tip 2nd dor dk

" width 16

underside pectorals &

Pect, base 14

ventrals mottled

" height 48

" width 23

Jaws in alc (Tin Tag # 11272)

Ventral base 12

Skin salted (" " # 11273)

Anal, base 8

" height 12 1/2

" width 14 1/2

Station No. C 20029

Date: Nov. 25

1919

Hour: 7:00 A.M. to 8:46 A.M.

Position: Lat. From 24° 24' 00" To 24° 22' 15" N Long. 83° 18' 00" W 83° 16' 00" W

Locality: SE of Dry Tortugas

Depth: 95 fms Bottom: wh M
176 meters

Sample: 20

Wind: Direction, Force, 1

Air 76-11

Sea: smooth Sky: clear

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B S. #	26.7 80.0				✓	*
50	N2 20876 R 11498	25.84	25.0	0	25.84	✓	5
100	N2 20872 R 11500	20.15	25.0	-13	20.02	✓	4
150	N2 16868 R 11497	16.05 15.98	25.0 25.0	-28 -24	15.77 15.74	✓	6

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Blue

Transparency:

REMARKS: Excess water, surface level

NETS, ETC., USED

Description	Depth <i>meters</i>	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	150-0	AM		
Bottom net (cable out 200 m)	150-0	8:01	8:40	
1 meter net (cable out 100 m)	50-0	8:01	8:37	
1/2 meter # 20	}	7:55	8:30	

11-5314

NOTES

Bottom & meter nets towed 30 min
Surface nets towed 35 min

All hauls very rich

Station No. C 20030

Date: Nov. 26

1919

Hour: 4:00 P . M. to 5:40 P . M.

Position: Lat. \checkmark From $24^{\circ} 25' 00''$ To $24^{\circ} 23' 00''$ N Long. \checkmark $82^{\circ} 58' 00''$ $82^{\circ} 57' 00''$ W

Locality: S. of Dry Tortugas

Depth: 48 fms Bottom: wh M Sample: Tintas 412.75
87 meters.

Wind: Direction, _____ Force, _____

Sea: Sky:

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
						1	

CURRENTS

[illegible]

Color of water:

Transparency:

REMARKS: *Black pike, snapper, etc.*

11—5114

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
9' Trawl (Ag. fr.) + mud bag cable out 300 fms	bottom	PM 4:30 5:40		

11-5314

NOTES

Trawl towed 45 min
 One side of frame parted and whole
 frame was crumpled beyond repair.
 Brought up 2-3 cu ft white mud,
 with worms, mollusks + crustaceans

Station No. C 20031

Date: Nov. 16

1919

Hour: 10:06 P. M. to 11:23 P. M.

Position: Lat. From 24° 23' 00" Long. 82° 21'

Locality: Midway between Key Loring + Key West

Depth: 72 m Bottom: wh M

Sample: Tin Tag
#11781

Wind: Direction, E Force, 2

Air 79

Sea: smooth Sky: clear

TEMPERATURES

Depth meters	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B. S. #	79.5				✓	
10	N2 20876					✓	5
	R 11498	25.91	25.0	0	25.91		
30	N2 20872					✓	4
	R 11500	25.88	25.0	-0.2	25.86		
60	N2 165868	24.40	25.5	-1.5	24.25	✓	6
	R 11497	24.29	25.0	-0.9	24.20		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Silty wh. snapper land

11-5314

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Vertical (1/2 meter)	60-0	PM		
Bottom net (cable out 60 m)	60-0	10:47	11:23	
Water net (cable out 30 m)	30-0	10:47	11:20	
1/2 meter #20	0	10:50	11:20	

11-5314

NOTES

Bottom, 1 meter & surface nets towed 30 min.

Vertical haul fair
All other hauls very rich

Station No. C 20033

Date: Dec 5

1919

Hour: . M. to . M.

Position: Lat. Long.

Locality: Fernandina hbr., Fla.

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: _____ Sky: _____

TEMPERATURES

[illegible]

CURRENTS

[illegible]

Color of water:

Transparency:

REMARKS:

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	

11-5314

NOTES

A few haul made with 35' shrimp
trawl from motor launch, in entrance
to harbor.

Haul:

Many invertebrates and many
fishes, all sciemids, representing
following - named genera -

Bairdella

Cynoscion

Girella

Leiostomus

Microgaster

Prionotus

Amelia River

Station No. *C 20034*Date: *Dec. 8*191*9*Hour: *11:50 A. M.* to *12:47 P. M.*Position: Lat. *30°45'45"N* Long. *81°20'00"W*Locality: *2-3 mi off Fernandina hbr, Fla*Depth: *13 m* Bottom: *bl M*Sample: ^{Tin Tag} *#11298*Wind: Direction, *SE x S* Force, *1 1/2**Air 74*Sea: *smooth*Sky: *light clouds*

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>metres</i>	<i>B.S.*</i>	<i>18.4</i>					<i>#</i>
<i>0</i>		<i>165.0</i>				<i>✓</i>	
<i>10</i>	<i>NZ 20876</i>	<i>0</i>				<i>✓</i>	<i>5</i>
	<i>R 11498</i>	<i>x 18.48</i>	<i>21.0</i>	<i>-06</i>	<i>18.42</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Edible sds, surface*

11-5314

NETS, ETC., USED

Description	Depth meters	TIME		Speed
		Down	Up	
Bottom net (cable net 30m)	bottom to 0	12:11	12:47	
# 20 1/2 meter	0	12:20	12:50	

11-5314

NOTES

All nets towed 30 min

all hauls rich

Station No. *C 20035*Date: *Dec 9*

1919

Hour: *7:50 A.* M. to *1:30 P.* M.Position: Lat. *32°10'15"N* Long. *79°07'00"W*Locality: *100 fm line, off Charleston, P.C.*Depth: *214 m* Bottom: *gn M, S* Sample: *Tintas #11299*Wind: Direction, *S* Force, *2**Air 75*Sea: *choppy* Sky: *cloudy (showers)*

TEMPERATURES

Depth meters	Thermometer - Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	<i>B. S. #</i>	<i>{ 23.1 73.5</i>				<input checked="" type="checkbox"/>	<i>X</i>
50	<i>N1 165868</i>	<i>22.62</i>	<i>23.5</i>	<i>-17</i>	<i>22.45</i>	<input checked="" type="checkbox"/>	<i>6</i>
	<i>R 11497</i>	<i>22.53</i>	<i>23.0</i>	<i>-08</i>	<i>22.45</i>		
100	<i>N2 20814</i>					<input checked="" type="checkbox"/>	<i>1</i>
	<i>R 11499</i>	<i>15.71</i>	<i>23.0</i>	<i>-15</i>	<i>15.56</i>		
150	<i>N2 20872</i>					<input checked="" type="checkbox"/>	<i>4</i>
	<i>R 11500</i>	<i>14.47</i>	<i>23.0</i>	<i>-19</i>	<i>14.28</i>		
200	<i>N2 20876</i>					<input checked="" type="checkbox"/>	<i>5</i>
	<i>R 11498</i>	<i>13.41</i>	<i>23.0</i>	<i>-20</i>	<i>13.21</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Elect. m. 200 fm*

11-5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
5' Trawl (cable out 300 fms)	bottom surface	AM 9:20	9:50	
75' flounder (otter rig) cable out 325 fms	bottom	PM 11:00	PM 1:30	
1/2 meter # 20	} 0	11:45	12:30	

11-5314

NOTES

5' Trawl towed 25 min

75' flounder trawl towed 2 hrs
87 - 80 fms (beginning & end of tow)
Surface nets towed 15 min

5' Trawl haul scanty
flounder, few crustaceans & mollusks
Flounder trawl haul, scanty
few per crabs, many brittle stars,
few squid, 3 fishes
Surface hauls fair - meagre

Results of the trawl hauls indicate
barren bottom - the bottom possibly
too hard

Station No. *C 20036*Date: *Dec 10*191 *9*Hour: *8:30 A.M.* to *10:30 A.M.* *approximate*Position: Lat. *33° 51' 15" N* Long. *78° 05' 15" W*Locality: *Cape Fear*Depth: *6 fms*
10 meters Bottom: *—* Sample: *—*Wind: Direction, *NW* Force, *1*
*Air 74-70*Sea: *smooth* Sky: *cloudy*

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>meters</i>	<i>B.S. *</i>	<i>15.3</i>					<i>*</i>
<i>0</i>		<i>15.5</i>				<i>✓</i>	
<i>10</i>	<i>N2165868</i>	<i>14.70</i>	<i>17.0</i>	<i>-18</i>	<i>14.52</i>	<i>✓</i>	<i>6</i>
	<i>R11497</i>	<i>14.55</i>	<i>17.0</i>	<i>-09</i>			

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

11-5314

Date: Dec 12

1919

Hour: 5:55 P. M. to 9:05 P. M.

Position: Lat. *From* $33^{\circ} 34' 15''$ *To* $33^{\circ} 40' 45'' N$ Long. $76^{\circ} 41' 00''$ W

Locality:

Depth: 210 m Bottom: S, Sh

Sample:

Wind: Direction, *Sx E to SE* Force, *3-4*

Air 74

Sea: heavy

Sky: partly cloudy

TEMPERATURES

Depth	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
<i>metes</i> 0		{ 22.2 72.0					

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Elect sch, snpr*

11—244

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
75' flounder trawl cable net 325 fms	bottom	PM 6:50	7:05	

11-5314

NOTES

Trawl towed 1 hr 45 min

Hand - netting, ~~catching~~, etc.

Station No. *C 20038*Date: *Dec 13*191 *9*

Hour: . M. to . M.

*Throughout the morning*Position: Lat. *34° 34' 30" N*Long. *76° 36' 30" W*Locality: *Cape Lookout*Depth: *9 fms*
16 m

Bottom: —

Sample: —

Wind: Direction, *S*Force, *1**Air 69-63*Sea: *smooth*Sky: *cloudy & SE*

TEMPERATURES

Depth meters	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0		<i>14.2</i> <i>57.5</i>				✓	<i>#</i>
15	<i>N2 161868</i>	<i>13.66</i>	<i>17.0</i>	<i>-19</i>	<i>13.47</i>	✓	<i>6</i>
	<i>R 11497</i>	<i>13.30</i>	<i>15.0</i>	<i>-07</i>	<i>13.23</i>		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: *Temperature & water samples taken at anchorage, 8:45 A.M.*

11-5714

Station No. C 20039

Date: Dec 13

1919

Hour: 5:45 P. M. to 11:10 P. M.

Position: Lat. \checkmark From $34^{\circ} 24' 40''$ \checkmark To $34^{\circ} 47' 30''$ N Long. $75^{\circ} 45' 30''$ $75^{\circ} 17' 30''$ W

Locality:

Depth: $\frac{0}{316}$ m Bottom: — Sample: —

Wind: Direction, S

Force, 1/

Air 79-7

Sea: heavy

Sky: cloudy (rain)

TEMPERATURES

Depth meter	Thermometer Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
0	B.S. #	25.0 (77.0)				\checkmark	\times
50	NZ 165868	24.58	24.0	-14	24.44	\checkmark	6
	R 11497	24.50	23.5	-05	24.45		
100	NZ 20874					\checkmark	1
	R 11499	23.21	23.5	-02	23.19		
175	NZ 20872					\checkmark	4
	R 11500	19.13	23.5	-11	19.02		
250	NZ 20876					\checkmark	5
	R 11498	12.39	23.0	-22	12.17		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS: Elbert Isd., super Isd.

11-5014

* Although snapper came up enclosed,
the indication of placed wire at 316 meters
was that bottom was reached. This apparently
erroneous.

Thermometer used, 100

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	
75' flounder trawl cable out 325 fms	no bottom	PM 7:30 9:55		
1/2 meter # 20	0	7:30	8:15	

NOTES

11-5314
Trawl towed 2 hrs
Plummet net towed 45 min.

20 net fouled in trawl cable and
lost, contents lost.

1/2 meter haul rich - shrimp, murex.

Trawl showed no evidence of having
touched bottom; up at 10:30 pm.
showed 620 fms water. The conclusion
is, that water was much deeper than
was supposed, and with only 325 fms of
cable, the trawl was at no time on
bottom.

Station No. 20040

Date: Dec 14

191 9

Hour: 9:10 A. M. to 9:15 A. M.

Position: Lat. $35^{\circ} 16' 30''$ Long. $75^{\circ} 25' 15''$

Locality: Cape Hatteras

Depth: 19 m Bottom: gy S, M Sample: -

Wind: Direction, SW Force, 2

Att 66-64

Sea: *choppy* Sky: *cloudy*

TEMPERATURES

Depth	Thermometer -- Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used
metes	B.S. #	5128					X
0		55.0					
18	NZ 165868	13.20	15.0	-16	13.04		
	R 11497	13.31	15.0	-07	13.24		

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

11—5314

Station No. _____

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

Station No.

Date: _____

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: _____ Bottom: _____ Sample: _____

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

11—5314

NETS, ETC., USED

Description	Depth	TIME		Speed
		Down	Up	

11-5314

NOTES

Station No.

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: _____ Sky: _____

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

Station No.

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water: Transparency:

REMARKS:

11—5314

Station No. _____

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

Depth	Thermometer— Make and No.	Reading	Stem Temp.	Correc- tion	Corrected Temp.	W. Sample	Bottle used

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

11-5314

Station No.

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

[illegible]

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

Station No.

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

[illegible]

CURRENTS

Depth	Hour	Tide	Time down	Revolutions	Speed	Direction

Color of water:

Transparency:

REMARKS:

11—5314

Station No.

Date:

191

Hour: . M. to . M.

Position: Lat. Long.

Locality:

Depth: Bottom: Sample:

Wind: Direction, Force,

Sea: Sky:

TEMPERATURES

[illegible]

CURRENTS

[illegible]

Color of water:

Transparency:

REMARKS:

11—5314

191

Sea: Sky:

[illegible][illegible]

